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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/562,170

12/22/2005

Hubert Cecile Francois Martens

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS

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BRIARCLIFF MANOR, NY 10510

EXAMINER

BUTCHER, BRIAN M

ART UNIT

PAPER NUMBER

4113

MAIL DATE

DELIVERY MODE

08/18/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/562,170	Applicant(s) MARTENS ET AL.	
	Examiner BRIAN BUTCHER	Art Unit 4113	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 December 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>22 December 2005, 15 May 2007</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

The abstract of the disclosure does not commence on a separate sheet in accordance with 37 CFR 1.52(b)(4). A new abstract of the disclosure is required and must be presented on a separate sheet, apart from any other text.

The abstract of the disclosure is objected to because **it is more than 150 words in length**. Also, on **line 4** of the abstract, "**the data have first to be erased**" appears to need a change to "**the data have to be first erased**". Correction is required. See MPEP § 608.01(b).

The disclosure is objected to because of the following informalities: On **page 1**, no section heading for the title of the invention. Appropriate correction is required.

The disclosure is objected to because of the following informalities: On **page 3, line 11**, "**a wobbled track which wobble**" appears to need a change to "**a wobbled track in which wobbling**". Appropriate correction is required.

The disclosure is objected to because of the following informalities: On **page 3, line 32**, "**The data have first to be erased**" appears to need a change to "**The data have to be first erased**". Appropriate correction is required.

The disclosure is objected to because of the following informalities: On **page 4, line 1**, “**interest for the**” appears to need a change to “**interest to the**”. Appropriate correction is required.

The disclosure is objected to because of the following informalities: On **page 4, line 10**, “**example of medium**” appears to need a change to “**example of a medium**”. Appropriate correction is required.

The disclosure is objected to because of the following informalities: On **page 4, line 11**, “**example of device**” appears to need a change to “**example of a device**”. Appropriate correction is required.

The disclosure is objected to because of the following informalities: On **page 4, line 17**, “**1B**” appears to need a change to “**IC**”. Appropriate correction is required.

The disclosure is objected to because of the following informalities: On **page 4, line 23**, “**centreline**” appears to need a change to “**centerline**”. Appropriate correction is required.

The disclosure is objected to because of the following informalities: On **page 5, line 5**, “**comprises inter alias an optical**” appears to need a change to “**comprises, inter alias, an optical**” (See line 24). Appropriate correction is required.

The disclosure is objected to because of the following informalities: On **page 6, line 18**, “**four-quadrants**” appears to need a change to “**four-quadrant**” (See line 24).
Appropriate correction is required.

The disclosure is objected to because of the following informalities: On **page 6, line 20**, “**reference number**” appears to need a change to “**reference letters**” (See line 24).
Appropriate correction is required.

The disclosure is objected to because of the following informalities: On **page 8, line 30**, “**applicable independently on the type**” appears to need a change to “**applicable independent of the type**” (See line 24). Appropriate correction is required.

The disclosure is objected to because of the following informalities: On **page 9, line 5-6**, “**other elements or steps than those**” appears to need a change to “**elements or steps other than those**” (See line 24). Appropriate correction is required.

Drawings

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: **Figure 2 does not include reference numeral 35**. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to

avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: **Figure 2 includes reference numeral 72 which is not mentioned in the description.** Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 – 6, and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sato et al. (United States Patent 4,718,053), hereinafter referenced as Sato, in view of Van Woudenberg, (United States Patent Application Publication 2002/0126602 A1), hereinafter referenced as Van Woudenberg, and in further view of Komaki et al. (United States Patent 5,025,439), hereinafter referenced as Komaki.

Regarding **claim 1**, Sato discloses a device (see “optical information apparatus” column 1, lines 51 - 53) for driving a phase – change medium having a layer (see column 8, lines 13-15) made of a material capable of changing locally. Second, Sato discloses a plurality of operating modes including a writing mode for writing data on a medium by locally changing a material (see column 10, lines 10-26) and an erasing mode for erasing data written on a medium by locally changing a material (see column 10, lines 10 – 26). Third, Sato discloses means for producing a laser beam for scanning a medium (see “laser diode” column 2, lines 52 – 53, and figure 1 item 1). However, Sato fails to disclose a phase-change material capable of changing between an amorphous state and a crystalline state, a user interface through which a user can select an operating mode amongst a plurality of operating modes, changing the phase-

change material from crystalline to amorphous during writing, changing the phase-change material from amorphous to crystalline during erasing, means for controlling the power of the laser beam, means for rotating a medium at a linear velocity that depends on the selected operating mode, the linear velocity applied in a writing mode being higher than a maximum crystalline velocity, and the linear velocity applied in an erasing mode being equal to or lower than a maximum crystalline velocity. The examiner maintains that it was well known in the art for the optical information apparatus disclosed in Sato to include a phase-change material capable of changing between an amorphous state and a crystalline state, changing the phase-change material from crystalline to amorphous during writing, changing the phase-change material from amorphous to crystalline during erasing, means for controlling the power of the laser beam, as taught by Van Woudenberg. Furthermore, the examiner maintains that it was well known in the art for the optical information apparatus disclosed in Sato to include a user interface, means for rotating said medium at a linear velocity that depends on the selected operating mode, the linear velocity applied in a writing mode being higher than a maximum crystalline velocity, and the linear velocity applied in an erasing mode being equal to or lower than a maximum crystalline velocity, as taught by Komaki.

In a similar field of endeavor Van Woudenberg discloses an apparatus for recording (see page 2, paragraph [0014]) on a phase-change medium capable of changing from an amorphous state to a crystalline state during writing (page 4, paragraph [0035]) and capable of changing from a crystalline state to an amorphous state during erasing (see page 1, paragraph [0002]). In addition, Van Woudenberg

discloses a control unit (see page 4, paragraph [0034], and figure 1 item 36) that controls the power of the laser beam depending upon the selected operating mode. Also, in a similar field of endeavor Komaki discloses an optical system for recording (see column 4, lines 24 – 50) that includes a user interface (see “operating part” column 4, lines 10 – 13, and figure 3, item 13) and a means for rotating a medium at a linear velocity that depends on the selected operating mode (see “a construction for controlling” column 6, lines 3 – 10, and figure 5, items 30, 30a). In addition, Komaki discloses that the linear velocity applied in a writing mode is higher than a maximum crystalline velocity, and the linear velocity applied in an erasing mode is equal to or lower than a maximum crystalline velocity (see “optical disk is initialized while being rotated so that the linear velocity of the optical disk is lower than that upon writing of data” column 6, lines 28 – 40) as evidenced by Cheong et al. (page 1 paragraph [0008]) who explains that depending on the crystallization speed (which is inherent to a phase-change material although not explicitly disclosed in Komaki) an erasing action will suffer from the problem of being incomplete at a high linear velocity.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the optical information apparatus of Sato by specifically using the teachings in Van Woudenberg to include a phase-change material capable of changing between an amorphous state and a crystalline state, changing the phase-change material from crystalline to amorphous during writing, changing the phase-change material from amorphous to crystalline during erasing because such a material provides high optical contrast between amorphous and crystalline states.

Furthermore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a means for controlling the power of said laser beam depending on the selected operating mode because the operations of writing, erasing, and reading in the art are normally performed at different power levels. Also, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the optical information apparatus of Sato with the teachings of Komaki to include a user interface, a means for rotating said medium at a linear velocity that depends on the selected operating mode, and having the linear velocity applied in a writing mode being much higher than a maximum crystalline velocity, and the linear velocity applied in an erasing mode being equal to or lower than a maximum crystalline velocity because of the following reasons: A user interface provides manual control for a device, a means for rotating said medium at a linear velocity that depends on the selected operating mode provides a way on moving the phase-change medium relative to the laser beam for the operations of writing, erasing, and reading, and having the linear velocity applied in a writing mode being higher than a maximum crystalline velocity/the linear velocity applied in an erasing mode being equal to or lower than a maximum crystalline velocity ensures that writing/erasing occurs according to the characteristics of a phase-change medium.

Regarding **claim 2**, Sato, Van Woudenberg, and Komaki, the combination of hereinafter referenced as SVWK, disclose everything claimed as applied above (see claim 1), in addition SVWK disclose the selection of a reading mode for reading the data. Specifically, Sato discloses a reading mode (see column 11, lines 31-33) and

Komaki discloses a user interface (see "operating part" column 4, lines 10 – 13, and figure 3, item 13) supplying mode commands.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the optical information apparatus of Sato by specifically using the teachings in Komaki to include a user interface that allows selection of a reading mode because a user interface provides manual control for a device.

Regarding **claim 3**, SVWK disclose everything claimed as applied above (see claim 1), in addition SVWK disclose a means for reading the value of the power and the linear velocity to be used in erasing mode. Specifically, in a similar field of endeavor, Van Woudenberg discloses a means for reading on said medium (see "reading or detection operation", paragraph [0023]) the value of the power and the linear velocity to be used erasing.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the optical information apparatus of Sato by specifically using the teachings in Van Woudenberg to include a means for reading the value of the power and linear velocity to be used in the erasing mode in order to prevent an initial testing of the medium in order to determine the value of the power and linear velocity required for erasing.

Regarding **claim 4**, SVWK disclose everything claimed as applied above (see claim 1), in addition SVWK disclose an erasing mode, which erases data from irradiated areas, and a means for controlling the position of the laser beam. Specifically, Sato

discloses an erasing mode (see column 10, lines 10 – 26) which erases data from irradiated areas (see column 15, lines 64 - 68 and column 16, lines 1 - 5). Also, Van Woudenberg discloses a means for controlling the position of the laser beam (see “servo system” paragraph [0030], and figure 1 item 18).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the optical information apparatus of Sato by specifically using the teachings in Van Woudenberg to include a means for controlling the position of the laser beam because a laser beam must be moved relative to the data on a medium in order to perform the operations of writing, erasing, and reading.

Regarding **claim 5**, SVWK disclose everything claimed as applied above (see claim 4), in addition SVWK disclose a means for determining the location of data by looking locations up in a list of recorded-areas and means for removing areas of data from a list of recorded-areas after the areas of data are erased. Specifically, Van Woudenberg discloses a means for determining the location of areas of data by looking location up in a list of recorded-areas (see "transmission map", paragraph [0020]) and means for removing areas of data from a list of recorded-areas (see "The transmission map can be determined on the basis of the table of contents" paragraph [0042]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the optical information apparatus of Sato by specifically using the teachings in Van Woudenberg to include a means for determining the location of areas of data by looking the location up in list of recorded-areas and a means for removing areas of data from a list of recorded-areas because of the following

reasons: A means for determining the location of areas of data by looking the location up on a list of recorded-areas allows for the organization of data on a medium and a means for removing areas of data from a list of recorded-area allows for the updating of the organizational structure indicating the arrangement of data on a medium.

Regarding **claim 6**, SVWK disclose everything claimed as applied above (see claim 1), in addition SVWK disclose a means for determining the area(s) of the medium where data are written and means for controlling the position of the laser beam. Specifically, Van Woudenberg discloses a means for determining the area(s) of the medium where data are written (see "transmission map", paragraph [0020]) and means for controlling the position of the laser beam (see "servo system" paragraph [0030], and figure 1 item 18).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the optical information apparatus of Sato by specifically using the teachings in Van Woudenberg to include a means for determining the location of areas of the medium where data are written and means for controlling the position of the laser beam because of the following reasons: A means for determining the areas of the medium where data are written allows for the reading of the of data on a medium and a means for controlling the position of the laser beam allows a laser beam to be moved relative to the data on a medium in order to perform the operations of writing, erasing, and reading.

Regarding **claim 8**, Sato discloses a method of recording (see "recording and erasing method" column 1, lines 52 - 53) for driving a phase – change medium having a

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layer (see column 8, lines 13-15) made of a material capable of changing locally.

Second, Sato discloses a plurality of operating modes including a writing mode for writing data on a medium by locally changing a material (see column 10, lines 10-26) and an erasing mode for erasing data written on a medium by locally changing said material (see column 10, lines 10 – 26). Third, Sato discloses the production of a laser beam for scanning said medium (see “laser beam” column 2, lines 52 – 53, and figure 1 item 1 and “light beam” columns 18 -19, claim 19). However, Sato fails to disclose a phase-change material capable of changing between an amorphous state and a crystalline state, reading a user selection, changing the phase-change material from crystalline to amorphous during writing, changing the phase-change material from amorphous to crystalline during erasing, means for controlling the power of the laser beam, means for rotating a medium at a linear velocity that depends on the selected operating mode, the linear velocity applied in a writing mode being higher than a maximum crystalline velocity, and the linear velocity applied in an erasing mode being equal to or lower than a maximum crystalline velocity. The examiner maintains that it was well known in the art for the method of recording disclosed in Sato to include a phase-change material capable of changing between an amorphous state and a crystalline state, changing the phase-change material from crystalline to amorphous during writing, changing the phase-change material from amorphous to crystalline during erasing, means for controlling the power of the laser beam, as taught by Van Woudenberg. Furthermore, the examiner maintains that it was well known in the art for the method of recording disclosed in Sato to include the reading of a user selection, the

rotation of a medium at a linear velocity that depends on the selected operating mode, the linear velocity applied in a writing mode being higher than a maximum crystalline velocity, and the linear velocity applied in a erasing mode being equal to or lower than a maximum crystalline velocity, as taught by Komaki.

In a similar field of endeavor Van Woudenberg discloses a method of recording (see page 2, paragraph [0014]) on a phase-change medium capable of changing from an amorphous state to a crystalline state during writing (page 4, paragraph [0035]) and capable of changing from a crystalline state to an amorphous state during erasing (see page 1, paragraph [0002]. In addition, Van Woudenberg discloses a control unit (see page 4, paragraph [0034], and figure 1 item 36) that controls the power of the laser beam depending upon the selected operating mode. Also, in a similar field of endeavor Komaki discloses a method for recording (column 6, lines15—24) that includes a user interface (see “operating part” column 4, lines 10 – 13, and figure 3, item 13) that reads a user selection and the rotation of a medium at a linear velocity that depends on the selected operating mode (see “a construction for controlling” column 6, lines 3 – 10, and figure 5, items 30, 30a). In addition, Komaki discloses that the linear velocity applied in a writing mode is higher than a maximum crystalline velocity, and the linear velocity applied in an erasing mode is equal to or lower than a maximum crystalline velocity (see “optical disk is initialized while being rotated so that the linear velocity of the optical disk is lower than that upon writing of data” column 6, lines 28 – 40) as evidenced by Cheong et al. (page 1 paragraph [0008]) who explains that depending on the crystallization speed (which is inherent to a phase-change material although not

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explicitly disclosed in Komaki) an erasing action will suffer from the problem of being incomplete at a high linear velocity.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of recording by specifically using the teachings in Van Woudenberg to include a phase-change material capable of changing between an amorphous state and a crystalline state, changing the phase-change material from crystalline to amorphous during writing, changing the phase-change material from amorphous to crystalline during erasing because such a material provides high optical contrast between amorphous and crystalline states. Furthermore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a step of controlling the power of said laser beam depending on the selected operating mode because the operations of writing, erasing, and reading in the art are normally performed at different power levels. Also, it would have been obvious to one of ordinary skill in the art at the time the invention was made modify the method of recoding of Sato with the teachings of Komaki to include the steps of reading of a user selection, rotating a medium at a linear velocity that depends on the selected operating mode, and having the linear velocity applied in a writing mode being higher than a maximum crystalline velocity, and the linear velocity applied in an erasing mode being equal to or lower than a maximum crystalline velocity because of the following reasons: Reading a user selection provides manual control for a device, rotating a medium at a linear velocity that depends on the selected operating mode provides a way of moving the phase-change medium relative to the laser beam for the operations of writing,

erasing, and reading, and having the linear velocity applied in a writing mode being higher than a maximum crystalline velocity/the linear velocity applied in an erasing mode being equal to or lower than a maximum crystalline velocity ensures that writing/erasing occurs according to the characteristics of a phase-change medium.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Van Woudenberg (United States Patent Application Publication 2002/0126602 A1), hereinafter referenced as Van Woudenberg, in view of Komaki et al. (United States Patent 5,025,439), hereinafter referenced as Komaki.

Regarding **claim 7**, Van Woudenberg discloses a phase-change medium (see “optical media with two stable phases” paragraph [0002]) having a layer made of a material capable of changing locally between an amorphous state and a crystalline state when heated by a laser having an appropriate power (see “The starting phase is typically a crystalline phase . . . resulting in an amorphous structure.” paragraph [0002]) while said medium is rotated at an appropriate linear velocity (see “the recording or writing power to be used in non-written portions . . . and the like.” paragraph [0023]). Second, Van Woudenberg discloses a wobbled track in which the wobbling carries medium related information (see “Disc information data” paragraph [0032]) comprising writing power/velocity and erasing power/velocity. However, Van Woudenberg fails to disclose a phase-change medium where the linear velocity applied in a writing mode is higher than a maximum crystalline velocity, and the linear velocity applied in an erasing mode is not higher than a maximum crystalline velocity. The examiner maintains that it

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was well known in the art for the phase-change medium disclosed in Van Woudenberg to include a phase-change material wherein the linear velocity applied in a writing mode is higher than a maximum crystalline velocity, and the linear velocity applied in an erasing mode is not higher than lower than a maximum crystalline velocity, as taught by Komaki.

In a similar field of endeavor Komaki discloses an optical disk of a phase-change type for recording (see column 4, lines 24 – 50) where the linear velocity applied in said writing mode is higher than said maximum crystalline velocity, and the linear velocity applied in said erasing mode is not higher than said maximum crystalline velocity (see “optical disk is initialized while being rotated so that the linear velocity of the optical disk is lower than that upon writing of data” column 6, lines 28 – 40) as evidenced by Cheong et al. (page 1 paragraph [0008]) who explains that depending on the crystallization speed (which is inherent to a phase-change material although not explicitly disclosed in Komaki) an erasing action will suffer from the problem of being incomplete at a high linear velocity.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the phase-change medium of Van Woudenberg by specifically using the teachings in Komaki to include a phase-change material wherein the linear velocity applied in a writing mode is higher than a maximum crystalline velocity, and the linear velocity applied in an erasing mode is not higher than a maximum crystalline velocity because having the linear velocity applied in a writing mode being higher than a maximum crystalline velocity/the linear velocity applied in an

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erasing mode being not higher than a maximum crystalline velocity ensures that writing/erasing occurs according to the characteristics of a phase-change medium.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian M. Butcher whose telephone number is (571) 270 – 5575. The examiner can normally be reached on Monday - Friday 7:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's trainer, Jefferey F. Harold can be reached at (571) 272 – 7519. The fax phone number for the organization where this application or proceeding is assigned is (703) 872—9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305 – 4800.

BMB
August 11, 2008
/Jefferey F Harold/

Supervisory Patent Examiner, Art Unit 4113